

1.95cm



.15cm

Density?

MASS

VOLUME

$$d = \frac{\text{mass}}{\text{VOLUME}} = \frac{g}{\text{cm}^3}$$

VOLUME of Paperclip?

Stretch it out + use
Cylinder equation

Displacement method

- TAKE GRADUATED CYLINDER w/ WATER
Get INITIAL VOLUME is 5.8 mL
- DROP ITEM IN
- Get New VOLUME is 5.9 mL
- Difference of before + AFTER

Tennis ball 19 cm dia

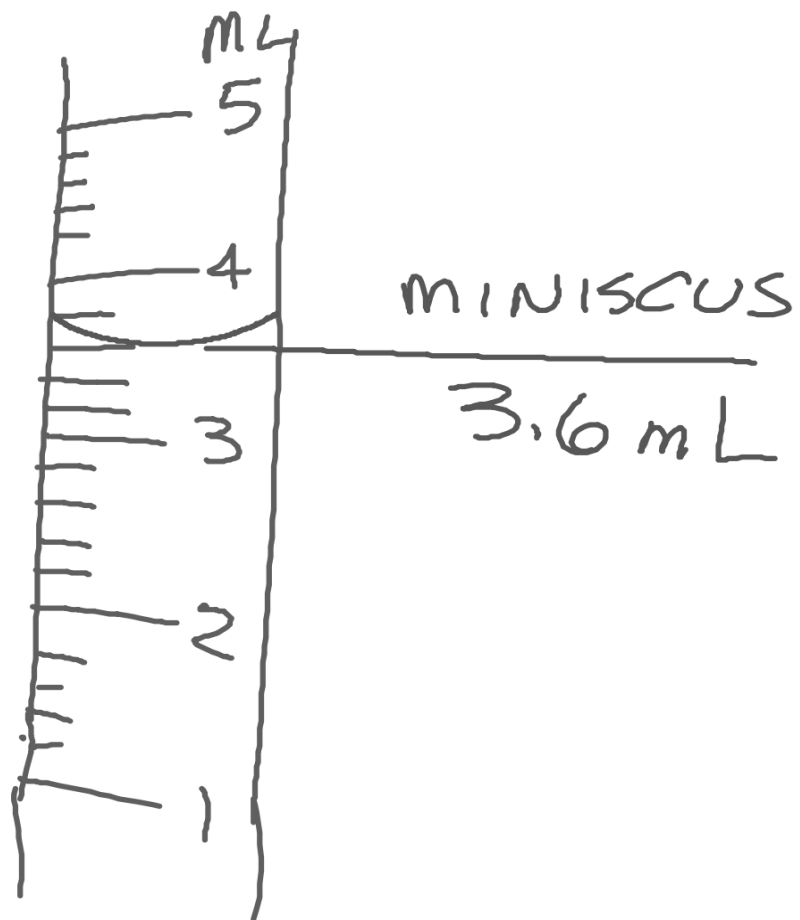
$$V = \frac{4}{3} \pi r^3$$

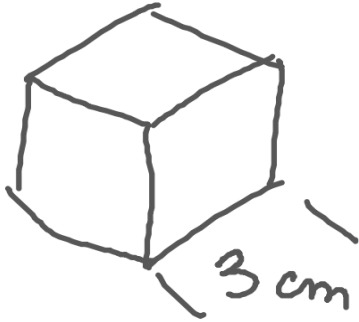
$$r = \frac{d}{2} = \frac{19}{2}$$

$$9.5 \text{ cm}$$

$$4 \div 3 * \pi * 9.5^3$$

$$V = 3591.4 \text{ cm}^3$$





MASS 115g
What is the
density?

$$V_{\text{cube}} = l \times w \times h$$
$$3\text{cm} \times 3\text{cm} \times 3\text{cm}$$
$$27\text{cm}^3$$

$$d = \frac{\text{MASS}}{\text{VOLUME}} = \frac{115\text{g}}{27\text{cm}^3} = 4.259/\text{cm}^3$$